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(71) Applicant and
(72) Inventor: LEWIS, Gary [CA/CA]; Box 2410, Pincher Creek, Alberta T0K 1W0 (CA).
(74) Agent: ADE & COMPANY; 1700-360 Main Street, Winnipeg, Manitoba R3C 3Z3 (CA).

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(54) Title: FERTILIZING SYSTEM AND METHOD BY EXTRACTING NITROGEN COMPOUNDS FROM COMBUSTION EXHAUST GASES

(57) **Abstract:** A fertilizer system is provided using extraction of nitrogen compounds and other plant nutrients from combustion exhaust gases, and which is particularly suited for use with an agricultural irrigation system or engine driven plant care equipment including self-propelled tractors, mowers and the like. The system includes an exhaust chamber in communication with the motor driving a pump of the system for receiving the exhaust gases therethrough. Water is injected into the exhaust chamber for mixing with the exhaust so that the steam being formed absorbs various nitrogen compounds and other plant nutrients from the surrounding hot exhaust gases. The steam is subsequently condensed in a condensing chamber from which condensate is collected and dispensed into the inlet of the pump with water circulated therethrough. The water is thus enriched with various nitrogen compounds and other plant nutrients absorbed from the exhaust gases before being dispensed to a planted area by an irrigation system or a sprayer attachment on a self-propelled tractor, mower and the like.